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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/661,506	09/13/2000	Robert Warren Schmidt	RCA 89,970	7961

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[REDACTED] EXAMINER

TRA, ANH QUAN

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2816

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/661,506	SCHMIDT, ROBERT WARREN	
	Examiner	Art Unit	
	Quan Tra	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 July 2003.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 10 is/are allowed.
- 6) Claim(s) 1 and 3-7 is/are rejected.
- 7) Claim(s) 8 and 9 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>12</u> . | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/25/2003 has been entered. A new ground of rejection is introduced as necessitated by amendment.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Rodgers (USP 5029299) (newly cited).

For claims 1, 5 and 7 the term “center tapped ground of the split level power supply”, given the broadest reasonable interpretation based on the specification and claims, is interpreted as ground which is center level between the two split of a split level power supply.

For claim 1, Rodgers discloses the figure a circuit for operating an amplifier designed for operation with a single ended power supply (the opamp 14 used with split level supply (V+ and V-) is also designed for a single power supply in that it can also operate to provide an output with only a single supply V+ and ground if such voltages were applied), the circuit comprising:

first voltage level translating means (22) for connecting a first polarity power supply terminal (20) of the operational amplifier integrated circuit (14) and a first capacitor (74) coupled to ground to a first polarity of the power supply (V+); second voltage level translating means (26) for connecting a second polarity power supply terminal (24) of the operational amplifier integrated circuit and a second capacitor (82) coupled to ground to a second polarity of the split level power supply (V-); and means (42) for connecting a signal input terminal (positive input terminal of 14) of the operational amplifier to a center tapped ground (ground is the median point between two same voltages with opposite polarity, V+ and V-); and wherein another signal input terminal (inverting input terminal of 14) of the operational amplifier 14 is coupled to a signal source referenced to ground without any DC isolation capacitors connected in series with the amplifier and the output terminal (32 or 38) of the operational amplifier is coupled to a signal load referenced to ground without any DC isolation capacitors connected in series with the amplifier.

As to claim 3, column 1, lines 14-15, teaches the load is loudspeaker.

For claim 5, the split power supply (V+ and V-) also provides power to other circuits (28, 30).

For claim 7, column 4, lines 24-25, teaches input signal (AC signal) applied to terminal 12 which is connected to the DC ground.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rodgers (USP 5029299) in view of Okada (USP 5909146) (newly cited).

Dodgers' figure shows all limitations of the claim except the amplifier circuit includes a plurality of amplifiers integrated on a common substrate having a same substrate bias. However, Okada's figure 5 shows an operational amplifier circuit having plurality of amplifiers (1, 2) integrated on a common substrate having a same substrate bias. Okada's figure 5 can widen voltage range of the input signals. Therefore, it would have been obvious to one having ordinary skill in the art to use Okada's figure 5 for Rodgers's amplifier 14 for the purpose of operatable a widen voltage range of the input signals.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rodgers (USP 5029299).

Rodgers' figure shows all limitations of the claim except for the power supply is capable of providing power for DVD player, and the circuit figure 1 is capable of driving earphone. However, it is notoriously well known in the art that DVD player having earphone (speaker). Rodger's figure has the advantage of limiting overload current to the load, thereby preventing damage to the load (speaker). Therefore, it would have been obvious to one having ordinary skill in the art to use Rodgers' amplifier circuit in the DVD player (the sizes of the elements in the amplifier have to be modified to be able to operate within in the DVD supply voltage) for the purpose of preventing overload current to the earphone.

***Allowable Subject Matter***

7. Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claim 10 is allowed.

Claims 8 and 9 would be and claim 10 is allowable because the prior art fails to teach or suggest a circuit (such as figure 2) having first and second level translation means (50, 52), wherein the first voltage level translating means and the second voltage level translation means each comprising Zener diode having respective Zener voltages selected to enable the integrated circuit to operate within a maximum voltage rating when powered by the split level power supply.

***Response to Arguments***

Applicant's argument is persuasive. A new ground of rejection is introduced.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references are cited as interest because they show same circuits analogous to the claimed invention.

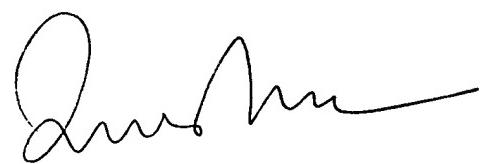
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan Tra whose telephone number is 703-308-6174. The examiner can normally be reached on 8:00 A.M.-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 703-308-4876. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

QT  
August 26, 2003



Quan Tra  
Patent Examiner